

AE-485 EXPANSION

FRONT PCB REF NO/VALUE	PRESENCE HAM/454 HAM START	40 CH ONLY	40 CH ONLY	40 CH ONLY	454 CH ONLY	454/HAM CB START	40/HAM CB START
SW 411 - 0ohm	X	0/X	0/X	0	X	X	0
R415 - 0ohm	X	0	X	0	X	X	0
SW 412 - 0ohm	X	0/X	0/X	0	0	X	X
D2 - 1N4148	0	0/X	0/X	0	0	X	X
R418 - 100Kohm	X	0/X	0/X ,	0	0	0	0
R 414 - 10Kohm	X	0	0	X	X	X	X
	step enable	step disable	step disable ch9+power on cb 454 and cb/ham enable	step enable	step enable	step enable	step enable
*454 CH - STEP FUNC ENABLE							

* 0 - INSTALL x - OPEN

CHANNEL EXPANSION SS-485H.

1. DISCONNECT POWER LEAD FROM THE POWER SUPPLY.
2. CHANGE(MODIFICATION) CONNECTION AS PER THE ABOVE TABLE AND PCB DRAWING.
3. RESET : MAKE A SHORT CIRCUIT(CON4) BETWEEN RESET AND GROUND.
4. CONNECT POWER LEAD TO THE POWER SUPPLY AND THEN TURN ON, THEN HAM BAND OR CB BAND WILL BE DISPLAY.
5. PRESS "FUNC" SIMPLAY AND THEN PRESS "CALL" FOR MORE THAN 3SEC, THEN THE UNIT BECOME CB BAND OR HAM BAND.

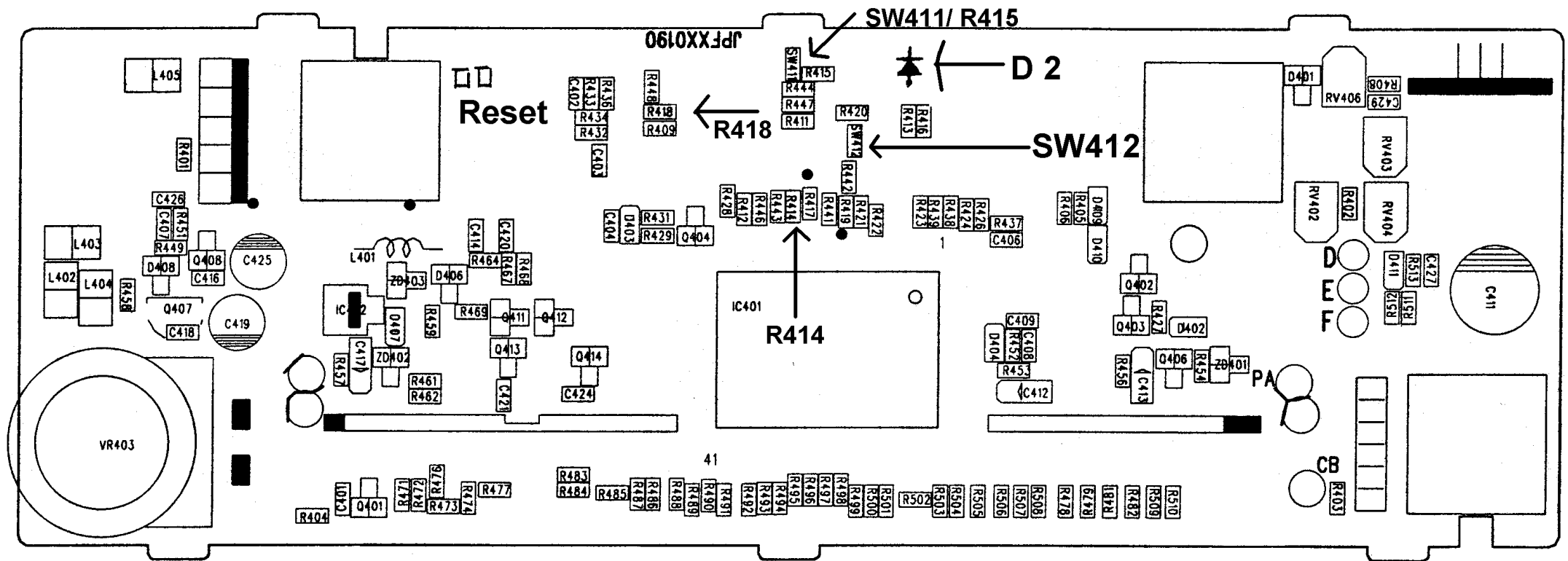
NOTE CB BAND MODE

PRESS "FUNC" BUTTON SIMPLAY AND THEN PRESS CALL FOR LESS THAN 1SEC TO CONVERT TO FREQUENCY READ OUT OR CHNNEL READ OUT.

6. "CALL" BUTTON

HAM BAND MODE : CALL BUTTON.

CB BAND (454CH) MODE : BAND SWITCH (BAND NUMBER A – J)



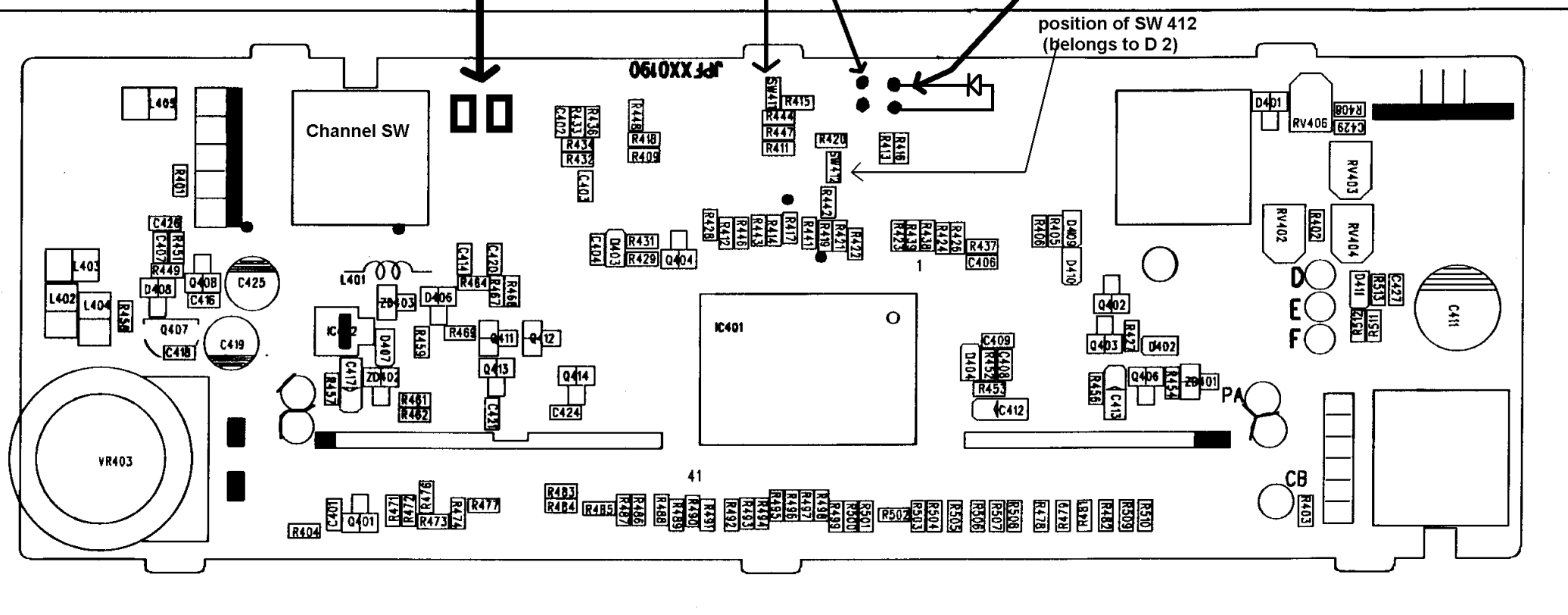
AE 485 S **Jumpers and** **Programming Points**

Reset
Contact Fields

Position for D 1 and
SW 411 (countries with
CB-Band only)

Position of D 2 (Germany and countries
where extension allowed)
(factory installed)

position of SW 412
(belongs to D 2)



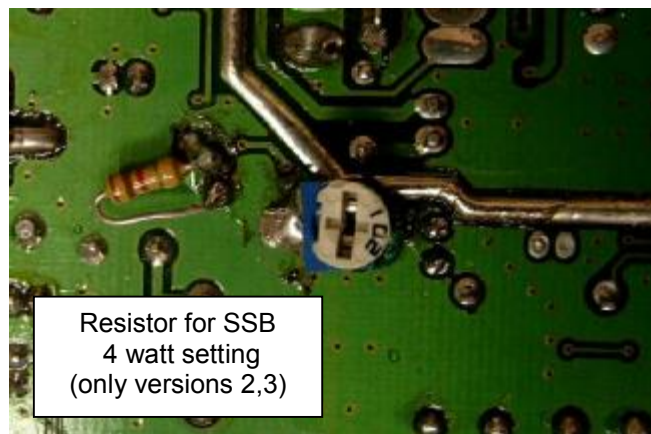
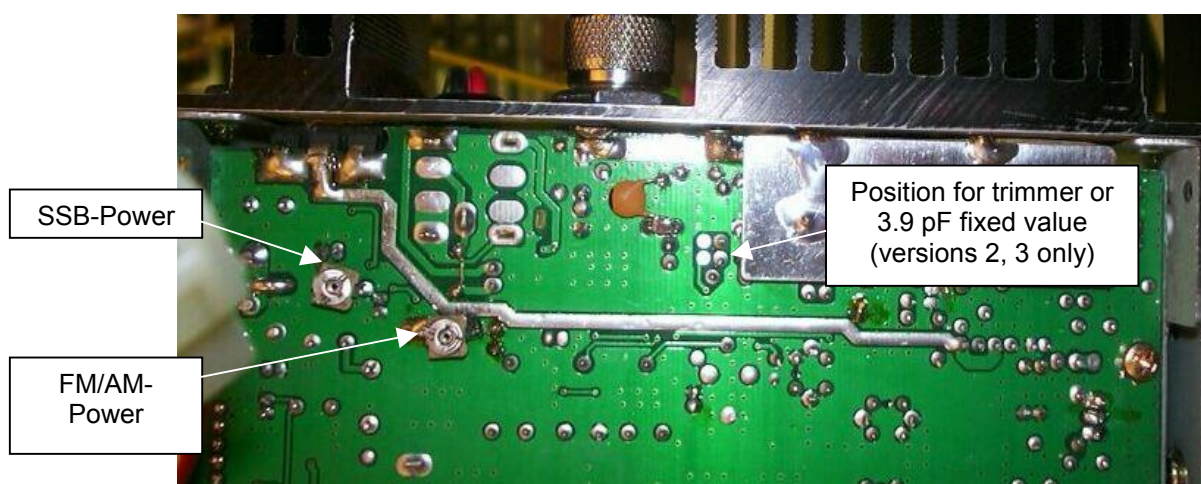
Modification Hints AE 5800 / March 2003

Increasing of Output Power for use by licenced radio amateurs

Problem:

AE 5800 has been shipped in up to now 3 slightly different versions, These versions have different output adjusting methods to keep the EN 300 433 limits in SSB (4 Watts PEP) , FM (4 Watts) and AM (1 Watt).

Version 1 (see picture) has 2 potentiometers on the soldering side.



The left potentiometer is for SSB only, the right for FM (AM is automatically set to 25 % of FM power) Both potentiometers are for output adjusting in the EN 300 433 version. The maximum tunable power value is around 10 watts.

Version 2 has **only one potentiometer** (for FM), but a small additional **red coloured trimmer capacitor** for SSB in the position, which is free in version 1 (see above photo).

Version 3 has one potentiometer for FM, a **fixed resistor** (1 kOhm, at the position where the SSB potentiometer was in version 1, see left photo), the small red trimmer or a fixed capacitor value 3.9 pF.

Output increasing:

If the tuning range of version 1 does not be enough, **delete both** potentiometers (version 1) or the FM potentiometer **and** the red trimmer capacitor (version2)

In version 3 please delete the 1 kOhms resistor, the FM potentiometer **and** the red trimmer or the fixed 3.9 pF capacitor.

Final adjustment of SSB-ALC:

It may be necessary to re-adjust **RV 9** on the component side in SSB to obtain 25 Watts PEP with modulation.

Note:

This modifications are only allowed when converting the radio to amateur frequencies 28-29.7 MHz (see AE 485 S) and for use by licenced amateur radio operators. Increased power is forbidden in CB frequency range!